California Climate

Zone 6

Reference City: Los Angeles (LAX)
Latitude: 33.93 N
Longitude: 118.4 W
Elevation: 110 ft

Basic Climate Conditions

	(F)
Summer Temperature Range	15
Record High Temperature (1963)	110
Record Low Temperature (1949)	27

Design Day Data

Winter	99%	41		
	97.5%	43		
Summer	*Mare Island*			
	1%:	83	MCWB	68
	2.5%:	80	MCWB	66

Climatic Design Priorities

Winter: Insulate
Reduce Infiltration
Passive Solar
Summer: Shade
Allow natural ventilation
Distribute Thermal Mass

Title 24 Requirements

Package	*C*	*D*
Ceiling Insulation	R38	R30
Wood Frame Walls	R21	R13
Glazing U-Value	0.42	0.67
Maximum Total Area	14%	20%

Climate

Climate Zone 6 includes the beaches at the foot of the southern California hills, as well as several miles of inland area where hills are low or nonexistent. The Pacific Ocean is relatively warm in these longitudes and keeps the climate very mild. Most of the rain falls during the warm, mild winters.

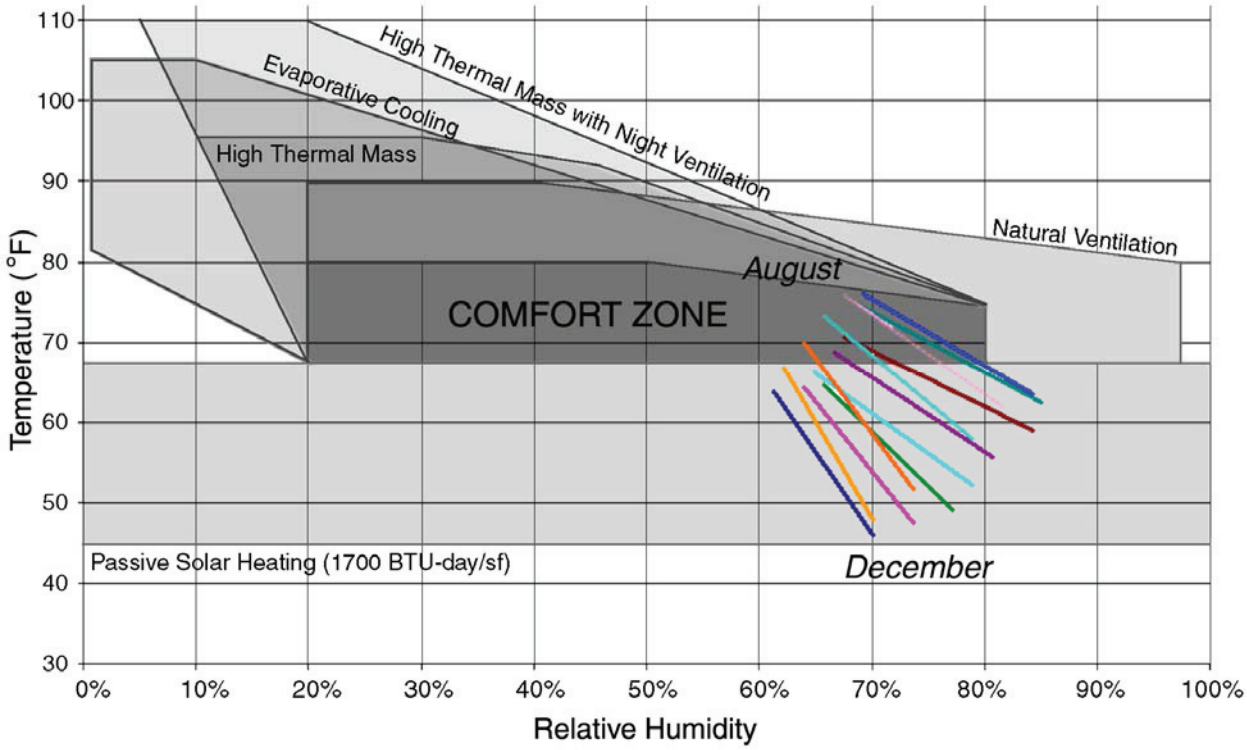
	Santa Barbara	*LAX*	*Long Beach*	*Torrance*
HDD	1902	1458	1430	742
CDD	470	727	1201	568

HDD = Heating Degree Days (base 65F)
CDD = Cooling Degree Days

Summers are pleasantly cooled by winds from the ocean. Although these offshore winds bring high humidity, comfort is maintained because of the low temperatures. Occasionally the wind reverses and brings hot, dry desert air.

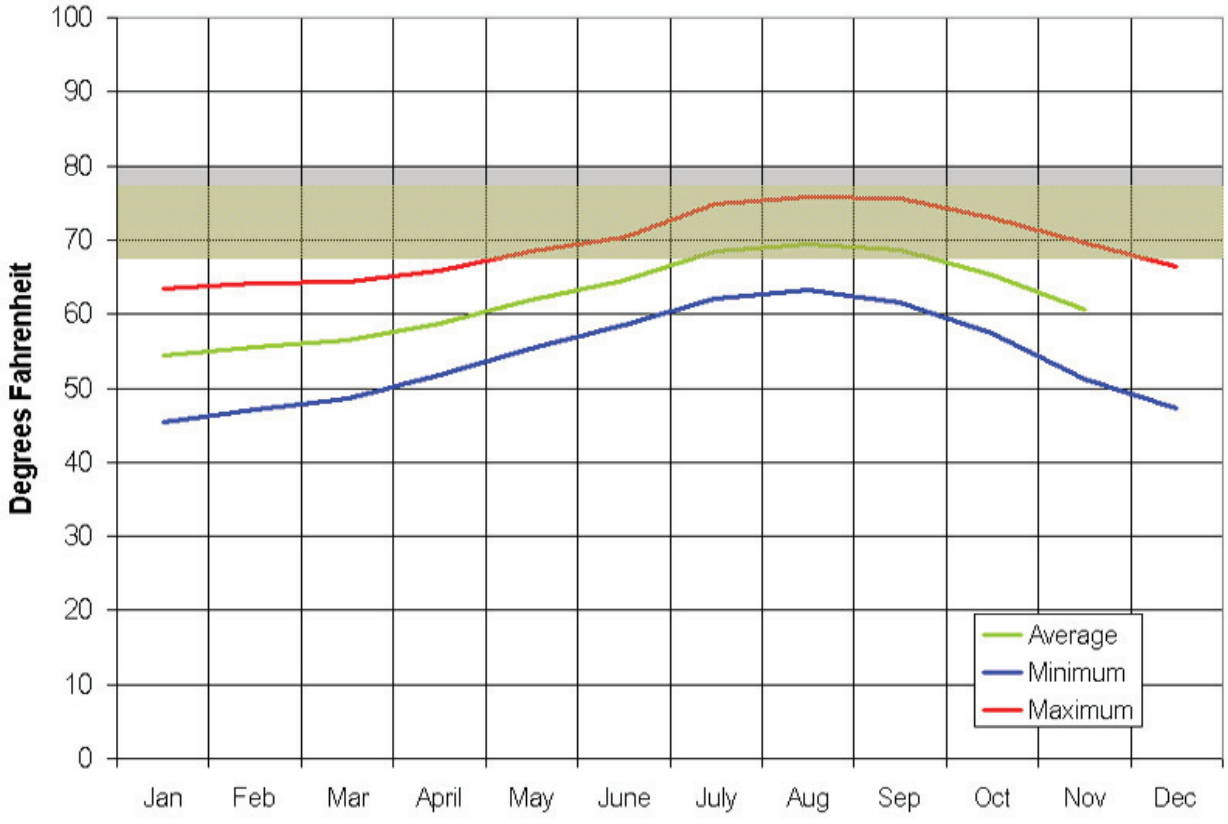
There is a sharp increase in temperature and decrease in humidity as one leaves the coast. Sunshine is plentiful all year, so solar heating, especially for hot water, is very advantageous. Climate Zone 6 is a very comfortable place to live and therefore requires the least energy of any region in California to achieve thermal comfort levels.

Bioclimatic Chart

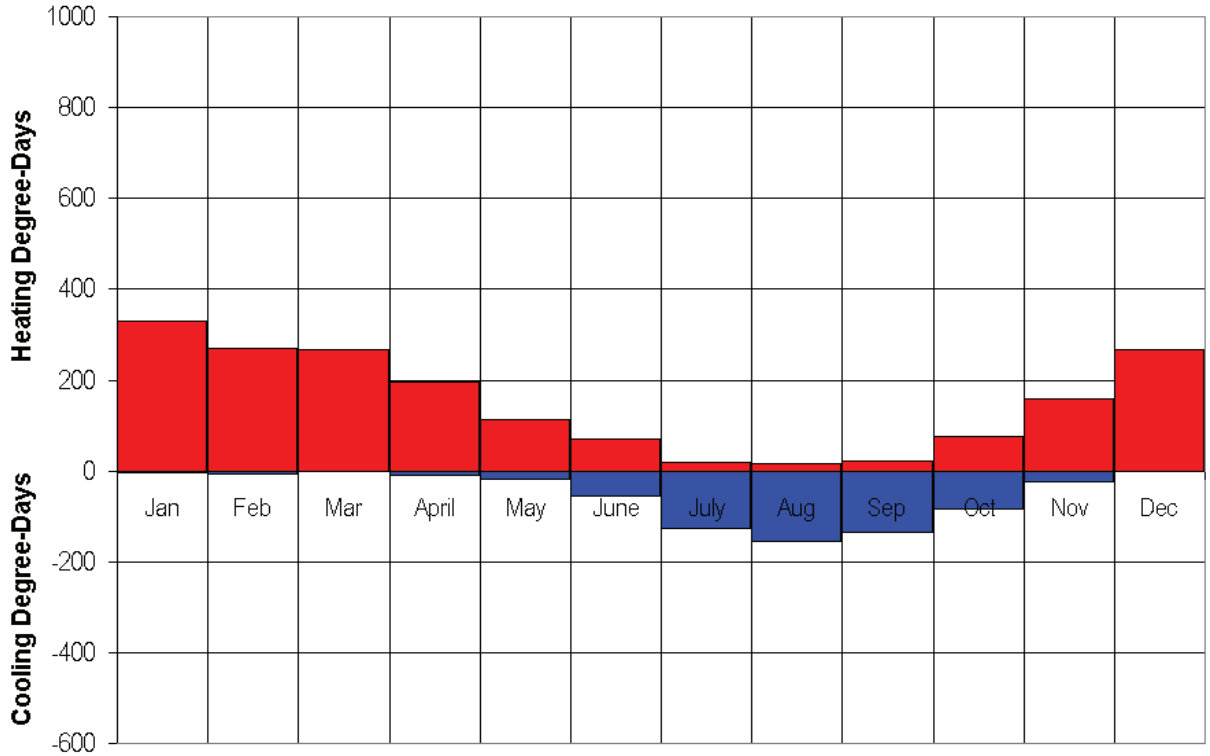


Temperature

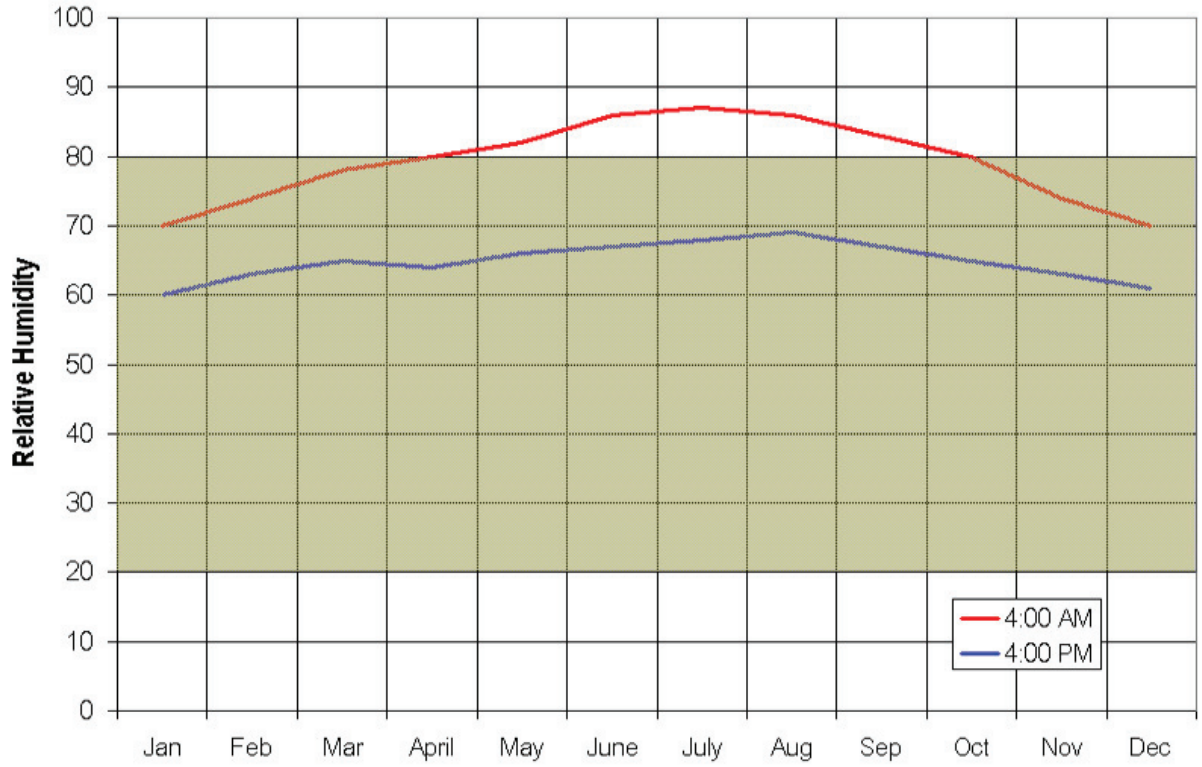
(Typical Comfort Zone: 68-80°F)



Degree Day
(Base 65°)

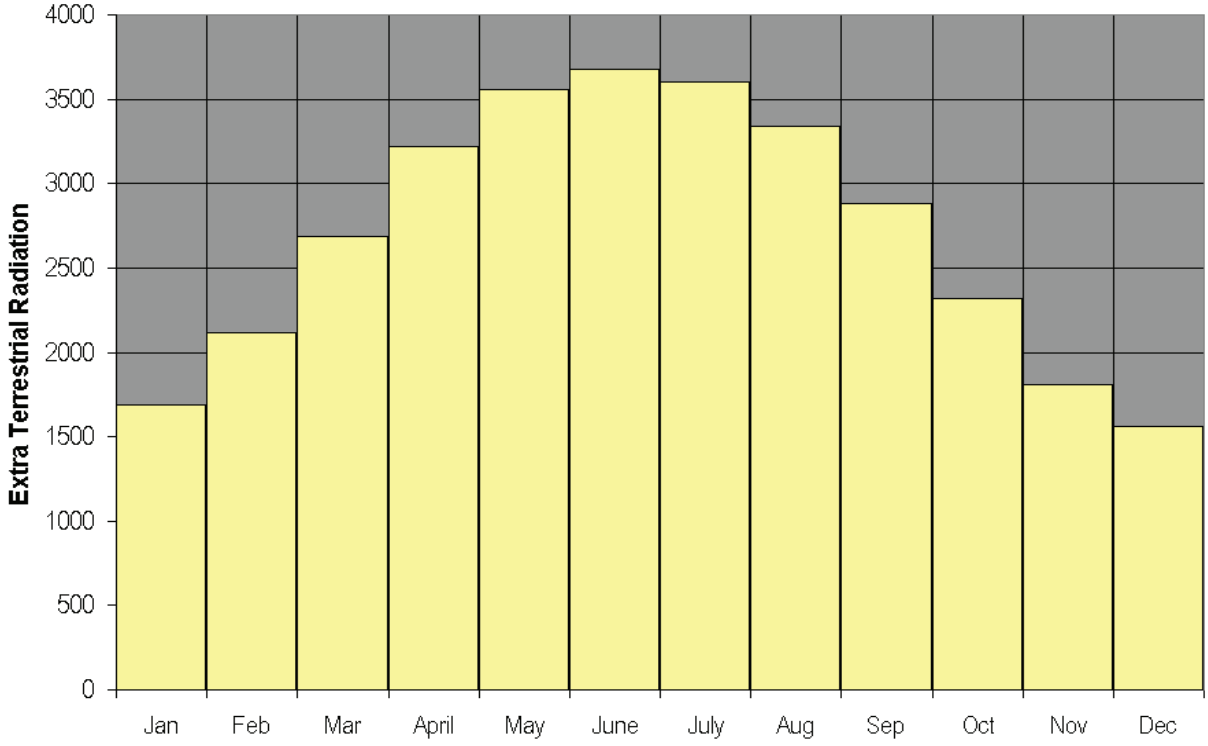


Relative Humidity
(Typical Comfort Zone: 20-80%)

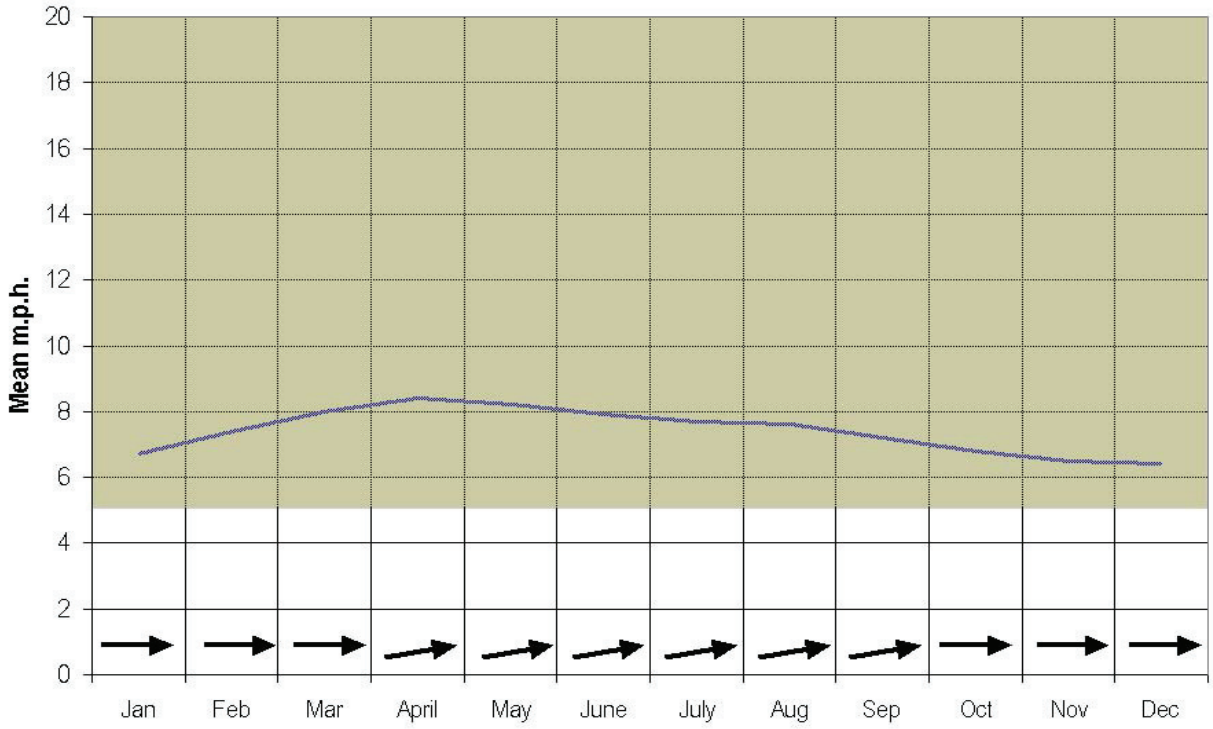


Extra-Terrestrial Radiation

Daily Mean ETR: 2704



Wind Speed



Prevailing Wind Direction

Summer: WSW
Winter: E

Natural Ventilation is most effective when wind speed is 5 mph or greater.